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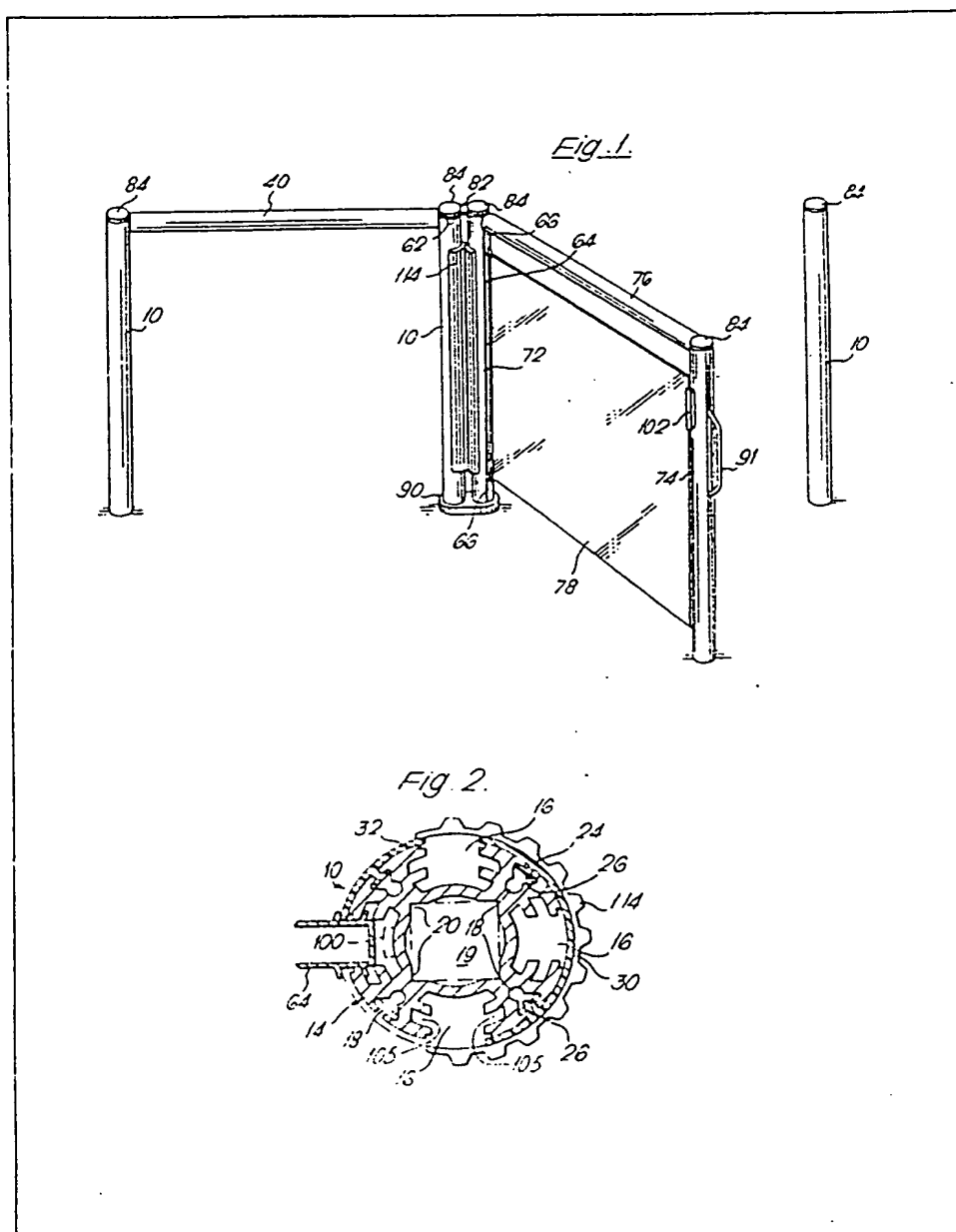
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(54) Posts; barriers; personnel
 guidance systems; gates

(57) Vertical posts 10 and horizontal
 rails 40 each comprise an elongate
 central member 14 and cladding 24,
 having complementary inter-engaging

retaining formations 18, 26.

Central member 14 may comprise
 central passage 19 and lateral
 channels 16 in which can be engaged
 ancillary members whereby posts and
 rails can be interconnected, panels
 fitted, and gate assemblies
 constructed.



GB 2 107 754 A

1/5

Fig. 1.

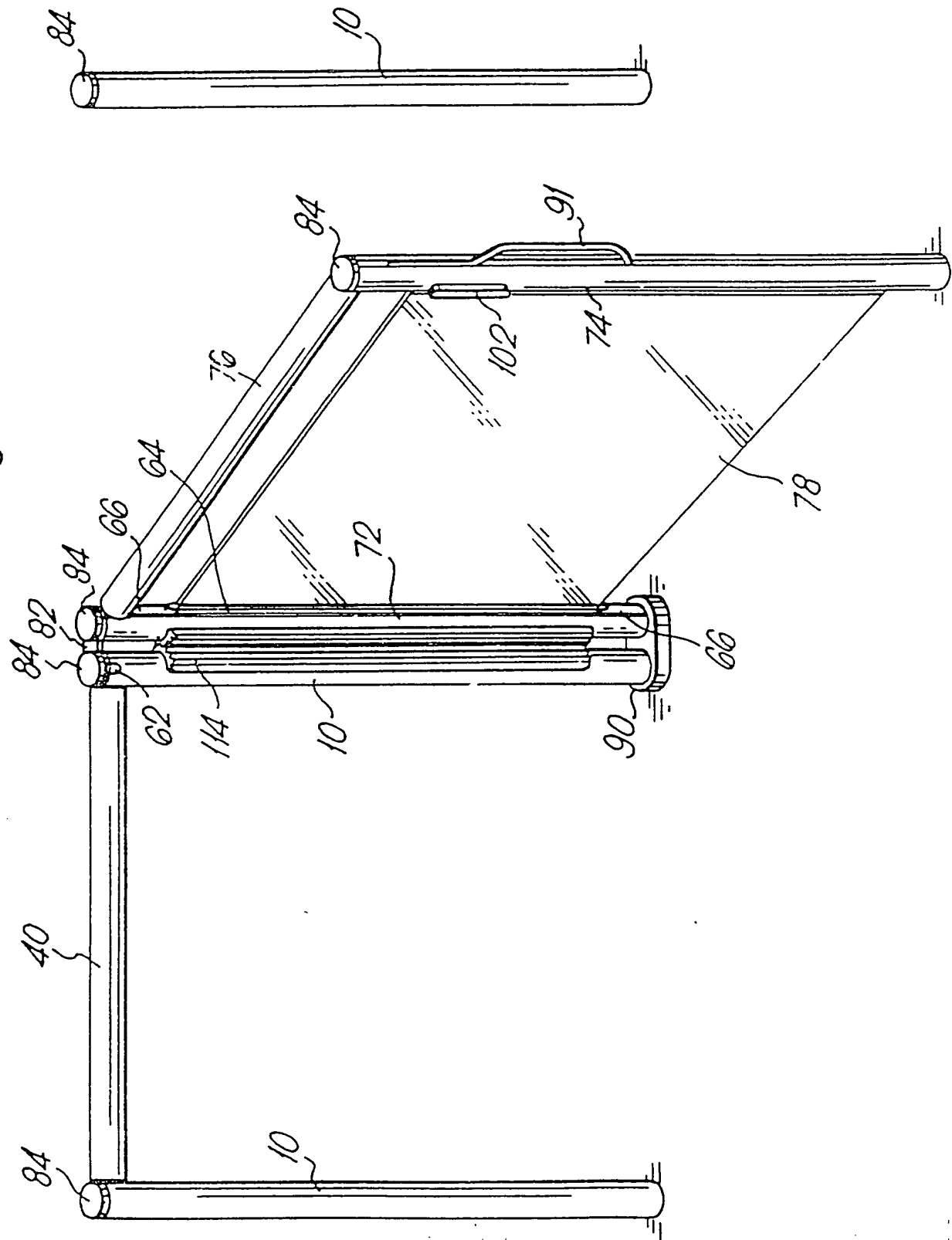


Fig. 5.

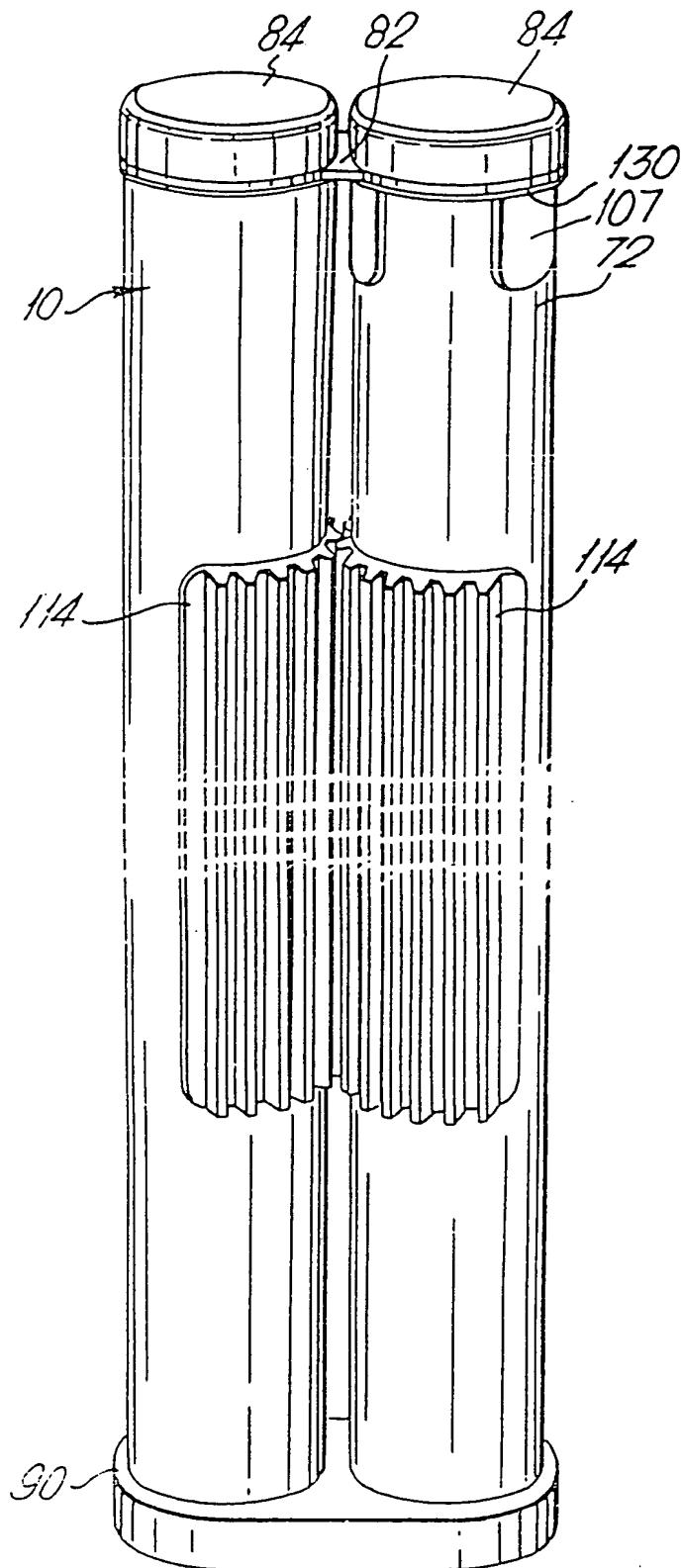


Fig. 6.

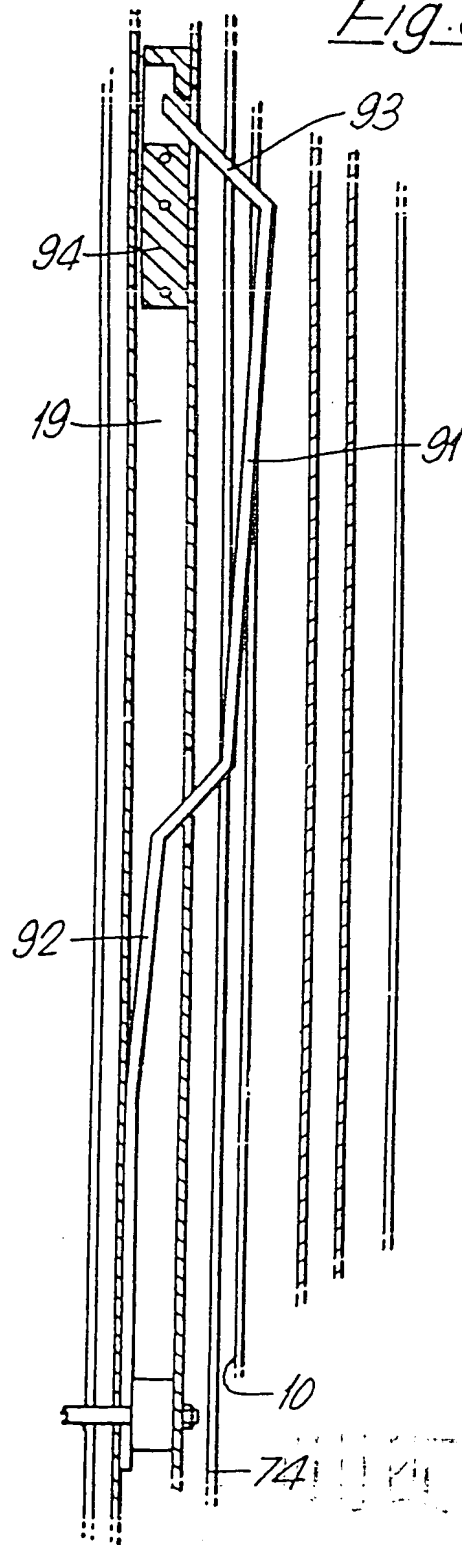
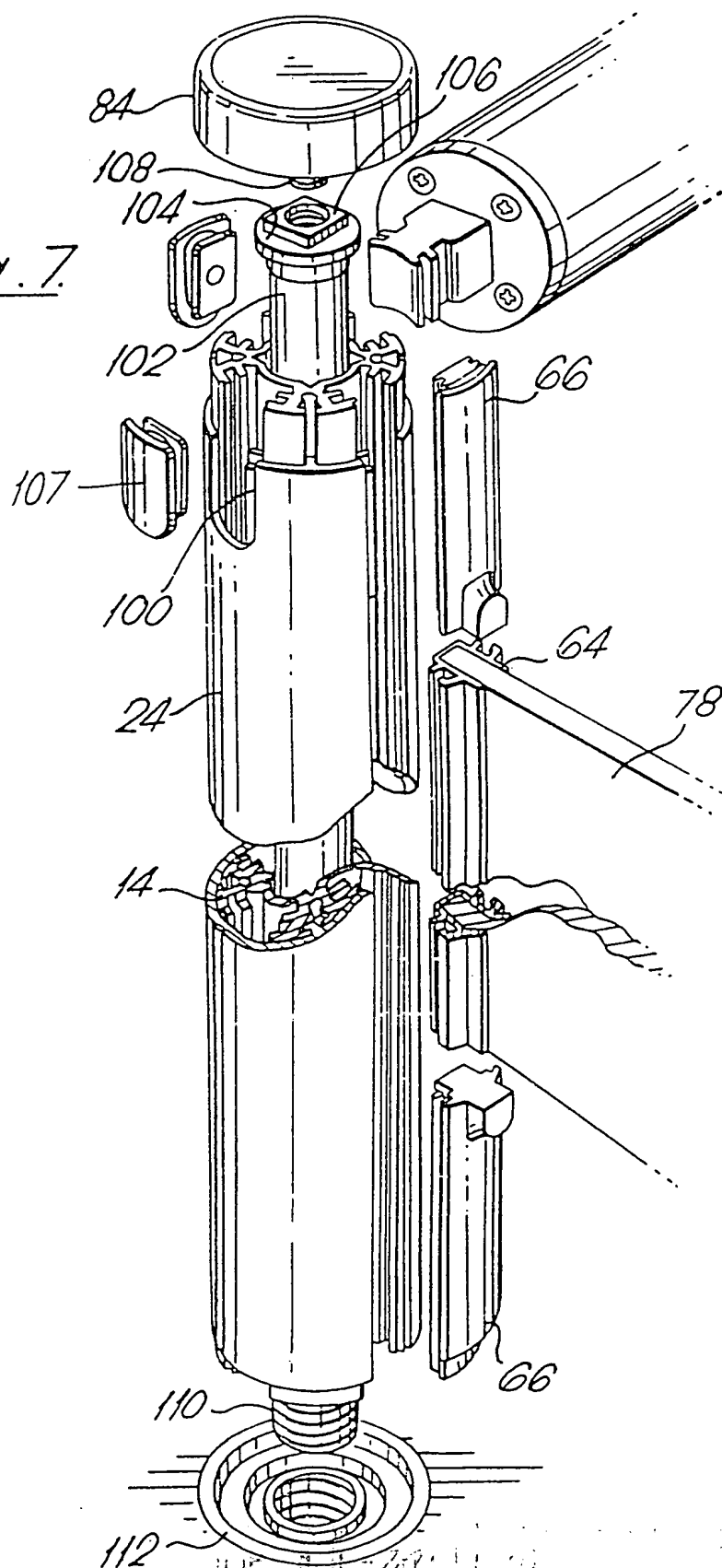


Fig. 7.

SPECIFICATION

Improvements in and relating to barrier systems and the like

This invention relates to a barrier, personnel guidance system or the like and to components for such a system.

It is frequently desired, in public access buildings such as airport buildings and the like, to provide barriers or personnel guidance arrangements which can be readily taken down and re-erected, or varied as to layout etc., and which are nevertheless of a robust and durable nature and of an aesthetically pleasing appearance. Such systems generally comprise a series of vertical posts, with the space between posts being spanned by a rail of some sort. The posts may be set in complementary sockets or holes provided permanently in the floor of the building concerned and concealed by appropriate cover plates when the posts are not fitted.

Prior systems of this kind have had various disadvantages, for example in being expensive to produce initially, being prone to rapid deterioration, being difficult to repair satisfactorily and lacking versatility.

It is among the objects of the present invention to provide an improved barrier or personnel guidance system in which the above noted disadvantages are reduced or eliminated, and to provide components for such a system.

According to one aspect of the invention there is provided a post for use in a barrier or personnel guidance system, the post comprising an elongate central member of substantially uniform cross section throughout its length, an elongate outer cladding member of substantially uniform cross section throughout its length, on the exterior of the central member, and means retaining the cladding member on the central member, said means including retention formation means provided on the periphery of the central member and complementary retention formation means provided on the inside of the cladding member and engaging in the retention formation means on the central member.

According to another aspect of the invention there is provided a gate arrangement for a barrier or personnel guidance system comprising a series of fixed vertical posts with adjacent posts being connected by horizontal rail members, the gate arrangement comprising a gate assembly interposed between a first said fixed vertical post and a second said fixed vertical post not otherwise connected with the first said fixed vertical post by a said horizontal rail member, said gate arrangement comprising:

a mobile vertical post disposed adjacent and parallel with said first fixed vertical post, pivot means pivotally connecting said mobile vertical post with said first fixed vertical post for pivoting about a vertical axis,

and a barrier member extending from said mobile vertical post and movable therewith, said pivot means including an upper and a

lower pivot plate each lying substantially in a respective horizontal plane and each having a first aperture therein receiving rotatably a respective end of the first fixed vertical post, and a second aperture therein receiving a respective end of the mobile vertical post, whereby said pivot plates are pivotable conjointly about the vertical axis of said first fixed post, and said mobile post is pivotable about its vertical axis in said pivot plates.

According to yet another aspect of the invention, there is provided a barrier or personnel guidance system, comprising a series of fixed vertical posts with horizontal rail members each spanning the gap between a respective pair of adjacent said posts, the system including a gate interposed between two adjacent vertical posts, said gate including a first mobile vertical post disposed adjacent a first said fixed post, and a second mobile vertical post disposed adjacent a second said fixed post, means pivotally connecting said first mobile post to said first fixed post for pivoting about a vertical axis, and cooperating latch means on said second mobile post and on said second fixed post for retaining said gate in a closed position in which said second mobile post adjoins said second fixed post, and wherein said second mobile post and said second fixed post are both members of a cross-section affording a longitudinally extending outwardly open channel, said second posts being arranged so that in the closed position of the gate said channel of the second mobile post opposes said channel of the second fixed post, said latch means including a latch member mounted in said channel of one of said second posts for projection into and withdrawal from said channel of the other of said posts, and manually operable means for moving said latch member.

An embodiment of the invention is described below with reference to the accompanying drawings, in which:—

Figure 1 is a diagrammatic perspective view of part of a barrier system embodying the invention,

Figure 2 is a view in cross section of a post forming part of the system of Figure 1,

Figure 3 is a view of longitudinal section of an end part of a rail forming part of the system of Figure 1,

Figures 4 and 5 are perspective views, Figure 4 being an exploded view, showing the pivotal mounting of a gate post in the system of Figure 1, and

Figure 6 is a view in axial section of part of a gate post member incorporating a latch.

Figure 7 is an exploded, partial perspective view showing part of the barrier system, and

Figure 8 is a perspective view of an alternative gate arrangement for the barrier system.

Referring to the drawings, a barrier and pedestrian guidance system for a public access building comprises (see Figure 1) a plurality of upright posts 10, of cylindrical overall shape which are fitted at their lower end into holes or sockets provided in known manner in the floor of the building, said sockets terminating flush with

the floor surface. The posts 10 are removably secured in the sockets and the sockets, when not occupied by posts 10, are occupied by suitable filling members or covered by cover plates.

- 5 Each post 10 incorporates a central member 14 in the form of an aluminium extrusion, of the constant cross section shown and which corresponds to a cylinder with four major longitudinal channels 16 arranged at intervals of 10 90° around the central axis of the cylinder and opening on to the periphery thereof, four minor longitudinal channels 18 opening onto the periphery of the cylinder and each disposed midway between a respective pair of adjoining major channels 16, and a central through passage 15 19 having four right-angled V-section channels disposed in the same diametral planes as the minor channels 18 and defining the corner portions of a notional square section passage, the 20 central passage 19 having the portions disposed between these corner portions 20 formed as respective part-cylindrical portions of a notional cylindrical axial bore. The central passage 19 is thus suitably configured to receive snugly either a 25 cylindrical axial member or a square-section axial member of the appropriate sizes.

- Each post 10 is normally provided, on the external arcuate surfaces thereof, with plastics cladding 24, which may, if none of the channels 30 16 are to be utilised, take the form of a completely cylindrical thin-walled plastics tube formed internally at intervals of 90° therearound, with longitudinally extending, T-section ribs 26 which engage in and are retained in the channels 18. It 35 will be noted that each channel 18 opens onto the circumference of member 14 in a narrow slot, (which receives the stem of the T-section) and has, disposed radially inwardly of said slot, a transversely wider region in which the cross piece 40 of the "T" is received. The radially innermost part 101 of each channel 18 is part-cylindrical, having, in cross-section, the form of an arc of substantially more than 180°. The part 101 serves, when 45 required, to receive longitudinally driven self-tapping screws to retain end plates or the like, when used, on the end of such a central member 14.

- As will become apparent, it is frequently necessary for one or more of the channels 16 of a 50 member 14 to be exposed to the exterior, and in such cases use may be made of a second form of cladding element corresponding in form to the aforesaid completely cylindrical cladding element with one of the regions which would extend over a 55 channel 16 removed, or of a third form of cladding element corresponding in form to the first form of cladding element with the region extending over the arcuate surface of member 14 on either side of a channel 18 and over the adjoining channels 16 60 removed, or a fourth form of cladding element, one of which is shown at 30 in Figure 2 corresponding to the portion of the first form of cladding element extending over the arcuate 65 surface portions of the member 14 on either side of two adjoining channels 18 and over the

intervening channel 16, or of a fifth form of cladding element, indicated at 32 in Figure 2, which simply extends over the two arcuate surface portions of the member 14 on either side of a 70 single channel 18 and ending substantially at the adjoining edges of the channel 16 on either side.

While the arcuate outer surfaces of the member 14 may be smooth, it has been found advantageous to form these with small projections 75 at intervals, for example with a plurality of longitudinal ribs of small cross section as this has been found to reduce the frictional forces arising when a cladding element is slid longitudinally over the member 14 during assembly.

- 80 As shown in Figure 1, in the system illustrated, adjacent posts 10 are interconnected by rails 40 each extending from the upper end of one post 10 to the upper end of the adjacent post 10. The rails 40 are preferably formed of lengths of the same 85 extrusion as that indicated at 14 in Figure 2, similarly fitted with a cladding element, generally a completely cylindrical cladding element of the same kind as described above.

- Each rail member 40 is connected with the post 90 10 between which it extends by means of an insert 50 (Figure 3) which includes a shank portion parts of which are of square cross section such that the shank portion is a free sliding fit in the passage 19 with the corner portions 20 of the 95 passage receiving and guiding the corresponding corner portions of the square section part of the shank 50. The insert 50 also has a head portion 54 with a shape, in longitudinal horizontal section, which is complementary with the cross sectional 100 shape of one of the major channels 16, so that the head portion 54 can be slid longitudinally into one of the channels 16 from one end of the member 14 of a post 10 to be reliably and securely retained in said channel. The insert 50 is 105 preferably formed as a "slice" cut from an aluminium extrusion of the cross sectional shape shown in Figure 3, so that, with reference to the orientation adopted when the rail 40 is in position, the insert 50 has planar upper and lower faces 110 which are spaced apart by a distance corresponding to the spacing between the vertical flank walls of the insert 50 which are afforded by the longitudinally extending flanks of the extrusion. The shank of the insert 50 is preferably 115 formed with recesses 56 (defined by longitudinal grooves in the original extrusion) into which extend stop members, in the form of rivets 58 extending through the wall of the passage 19 from one of the channels 16 of the extrusion 14 of the 120 rail 40, so that the insert 50 is retained captive in the end of the rail 40 but can move axially relative to the rail 40 to a limited extent, as is necessary to take up tolerances in the placing of the posts 10. A set screw 60 may likewise be provided whereby 125 the insert 50 can be clamped in position relative to the rail 40. Indicated at 103 in Figure 3 is an end cap 103, for example of plastics, in the form of a flat circular disc of the same diameter as the cladding element 24, the end cap being fixed to the rail by 130 screws (not shown) screwed into the channel

portions 101 at the end of the rail member, the end cap having a central, square opening through which the shank of the insert 50 extends.

As indicated in Figure 1, the cladding member, or the appropriate one of the cladding members of a post 10 is provided with a notch 62 extending from the upper edge of the cladding member and in register with a respective main channel 16, and each insert 50 extends through such a notch 62 to engage in the central member 14 of the respective post 10. The insert member 50 bears upon, and is supported by a rail support 100, in the form of a curved support plate 100 received in the base portion of the respective channel 16 and secured, e.g. by screws (not shown) to the bottom of the channel. The upper end of the support 100 preferably has bonded thereto a rubber buffer which receives the insert 50 and serves to absorb dimensional tolerances. Those notches 62 of the cladding not required in any particular layout are covered by cover plates 107, for example of plastics each having a facing portion, which overlies the cladding around the notch, a neck portion which extends through the notch and carries a retaining plate the edges of which are lodged in the side channels 105 of the channel 16. The system also allows the spaces between adjacent posts beneath the rail 40 to be infilled if desired, by a suitable panel or a glass or plastics pane or the like. To this end, in each pair of adjacent posts 10 between which such a panel is to be fitted, the main channels 16 of the two posts 10 which face towards one another are fitted with respective panel-receiving members 64 in the form of lengths of extruded plastics material of the cross section shown in Figure 2, affording a channel to receive the edge of the respective panel, pane or the like, with a pair of longitudinally extending ribs on the outer side of each side wall of the channel defining, between each said pair or ribs, a groove to receive a respective peripheral flange portion of the extrusion 14 and the superimposed longitudinal edge of the respective cladding member. After the members 64 have been slid longitudinally into place the respective pane is slid into the channels provided by the members 64 prior to fitting of the respective rail 40. Finishing inserts, for example of plastics material, may be provided, for example of a cross section to allow such inserts to be slidably retained in a channel 16 and to present an outer face extending across the mouth of the channel 16 flush with the outer surface of the respective cladding element.

Such finishing inserts may, for example, be utilised, in applications such as that indicated at 66 between the upper end of a strip 64 serving to mount a panel or pane which stops short of the upper or lower end of the respective posts.

As shown in Figure 7, each vertical post 10 is secured to the floor by means of a central tie bolt 102 which extends through the central passage 19 and has its lower end externally screw-threaded, as indicated at 110 for engagement in a correspondingly internally screw-threaded bore provided centrally in a base 112 fixedly installed in

the floor, flush therewith, the base 112 having a shallow socket to receive the lower end of the central member 14. At its upper end, the tie bolt 102 has a radially outwardly extending collar 104 which, when the tie bolt is fully screwed home into the bore in base 112 bears upon the portions of the central member which bound the central passage 19 to clamp the central member axially. Above the collar 104, the tie bolt 102 has a square head 106 for engagement by an appropriate spanner. An axial bore extending from the upper end of the tie bolt is internally screw-threaded to receive a correspondingly threaded bolt 108 extending centrally from the underside of the cap 84 so that the cap 84 may be screwed down onto the insert(s) 50 and the top face of the central member, to clamp the insert(s) 50 firmly in place. The cap 84 is preferably screwed down using a strap-wrench so that it cannot be undone by hand alone.

The barrier system may also incorporate movable sections or gates which are pivotable relatively to the other parts of the system, for example to allow limited passage through a barrier or to divert pedestrian traffic flow etc. As shown in Figure 1, such a section or gate 70 comprises, in much the same way as a fixed section of the barrier, two upright posts, indicated at 72 and 74, of substantially the same form as the posts 10, spanned by a rail member 76 of substantially the same form as the rail members 40. A panel or pane 78 supported in the posts 72 and 74 by panel receiving strips 64 in the manner described above serves to brace the posts 72, 74 and rail 76 relative to one another. The post 72 is pivotally connected with an adjoining fixed post 10, for pivoting either about the longitudinal axis of the post 72 or about the longitudinal axis of the adjoining post 10 or about both such axes, as explained below, by means shown to a larger scale in Figures 4 and 5. Thus, the central member 14 of the post 72 and the adjoining fixed post 10, at the upper ends of these posts, may be arranged to stand proud of the plastics cladding 24 to a predetermined axial extent, and the projecting end portions of the members 14 to engage in respective openings in a spectacle-shaped plate 82, for example of metal. The plates 82 may then be held in place on the tops of the posts 72 and 10 by the respective caps 84 with which these posts are provided. With such an arrangement, the member 14 of either the post 10 or the post 72, together with the attached cap 84 is free to turn about its vertical axis within the member 82, or the members 14 of both posts 10 and 72 may be free to turn in this fashion about their respective vertical axes. The posts 10 and 72 may be pivotally connected at their lower ends in an entirely analogous fashion by an identical member 82 so that the gate 70 is pivotally supported from the post 10. The pivotal mounting at the lower ends of the posts 10, 72 is preferably arranged to support also the weight of the gate 70, and in this case a slightly modified pivotal connection between the posts 10 and 72 may be provided in

the lower ends of these posts, for example by means of a member 90 which is of increased depth as compared with the member 82 and may be of plastics material. The member 90 may also differ from the member 82 for example, in that the opening which receives the lower end of the post 72 does not, as in the case of the member 82, extend entirely through the member 90, but is formed as a blind bore to provide an upwardly facing thrust bearing for the post 72. The fragmentary perspective view of Figure 5 shows the upper and lower ends of the gate coupling arrangement in the assembled condition.

In the preferred arrangement, the part of the member 90 directly below the post 72 carries, on its underside, a wheel (not shown) rotatable about a horizontal axis intersecting the pivotal axis of member 90 with respect to post 10, said wheel bearing on the floor surface, and supporting the respective part of member 90 (and thus the post 72 etc.) so that the respective part of member 90 is held slightly off the floor surface. A similar wheel may be provided at the lower end of the post 74, to roll over the floor, and support the post 74, during opening and closing movements of the gate.

In the preferred embodiment of the invention, as shown in Figures 4 and 5, the apertures in the plate 82 are smaller in diameter than the central members 14, and receive rotatably respective short cylindrical tubular collars upstanding from the inner edges of respective annular bearing plates 73. Each plate 73 rests on the upper end face of the respective central member (at which the cladding terminates flush with the respective end face), and the tubular collar of each bearing plate receives internally a bearing formed by an annular rib projecting downwardly from the underside of the respective end cap 84¹. The end caps 84¹, like the end caps 84 are each provided with a respective downwardly extending screw threaded bolt for securing the end cap to the respective post.

In the case of the end cap 84¹ of the fixed post 10¹ the respective screw-threaded bolt 108 is screwed into the tie bolt 102, whereas in the case of the end cap 84¹ of the post 72, the respective screw-threaded bolt is screwed into an insert fixed in the central passage 19 of the central member, at its upper end, and having a screw-threaded bore to receive the bolt.

Instead of the whole lower end of the post 72 being rotatably received in a blind bore in the member 90, the post 72 may have, at its lower end, an insert fitted in the central passage 19 in the central member and having a downwardly projecting portion thereof formed as a cylindrical journal to fit rotatably in a complementary blind bore formed in the member 90, to afford a radial bearing for the post, whilst an annular plate, forming a thrust bearing, may be fixed to the lower end of post 72 to bear upon the upper surface of member 90.

The arrangement shown in Figures 4 and 5 permits pivotal movement of the member 82

relative to the post 10 as well as relative to the post 72. Whilst such an arrangement may be convenient in certain situations, if desired, it may be arranged that the member 82 and the corresponding member 90 is fixed with respect to one of the posts 10 or 72, for example by being formed with a formation engaging in one of the channels of the respective central member 14.

In the arrangement shown in the drawings the post 10 and the post 72 are each provided with externally presented gear teeth, the arrangement being such that the gear teeth on the post 10 engage with those on the post 72, so that the post 72 can roll around the post 10 in geared engagement therewith, permitting, for example, the gate 70 to be swung back flat against the adjoining fixed section of the barrier on either side. The gear teeth on the posts 10 and 72 are preferably provided by respective lengths of an arcuate-section extrusion, such as indicated at 114 in Figure 2, said lengths being adhesively bonded to the respective posts, the extrusion having a part cylindrical internal surface for engagement with the respective cladding member and a serrated or corrugated outer surface providing the gear teeth. It preferred, the gear teeth may be formed directly on the cladding members.

The gate 70 is shown as being provided with a latch arrangement comprising a bar 91 of the form shown in Figure 1 and to a larger scale in Figure 6, which bar is received at its upper and lower ends in that major channel 16 of the post 74 which faces away from the post 72, the bar 91 lying within the radially and axially extending plane of that channel 16. More specifically, the bar 91 includes a lower vertical portion lying within the respective channel 16 and connected, at its lower end, via an outwardly sloping portion with an upper, vertically extending portion which normally lies radially outwardly of the respective channel 16 and which carries at its lower end an inwardly sloping portion which passes, through an aperture cut in the bottom wall of the respective channel 16, into the central passage 19 of the central member of the post 74 where it is connected with a generally vertically extending portion 92, accommodated within the last-mentioned passage 19 and secured to the central member at its lower end. The portion 92 acts as a spring urging the upper vertically extending portion towards its outwardly projected position. An inwardly sloping portion 93 extends from the upper end of the upper vertically extending portion, through an aperture in the bottom wall of the channel 16, and into a sloping passage formed through a slider 94 slidable vertically within the central passage 19 in post 74 by means of an operating handle connected to the slider 94 by means of bolts extended through a slot formed in the bottom wall of channel 16 perpendicular to that receiving the member 91. When the gate 70 is closed, the radially outer portion of the bar 91 extends into the opposing open channel of the stationary post 10 which directly adjoins the post

74 when the gate is closed, the last mentioned channel 16 being, for this purpose, left exposed by adopting an appropriate cladding arrangement.

When the slider 94 is slid downwardly, the camming action of the wall of the inclined passage on the inclined portion 93 moves the upper vertically extending portion inwardly out of the channel 16 of the adjoining stationary post 10. The bottom wall of the channel 16 of post 74 diametrically opposed to that accommodating the upper vertical portion of bar 91 is also formed with an aperture through which the free end of portion 93 can pass in the fully retracted position of the bar.

The above description of the latch mechanism and its mode of operation omits, for the sake of simplicity, mention of the cladding etc. arrangements associated with the respective posts. In practice, the channel 16 in the stationary post 10 which receives the projected portion of the bar 91 is furnished with an appropriate plastics channel member similar to the member 64 of Figure 2, but having only one side wall extending outwardly from the cladding-engaging flange, to act as a stop for bar 91, and having the cladding-engaging flange of the other side wall extended further over the surface of the cladding 24 to provide a striker surface for bar 91, while the opposing channel in post 74 is furnished with a plastics channel member similar to member 64 but so arranged that in the closed position of the gate the outwardly extending side walls of the two channel members lie on opposite sides of the bar 91. The channel member on the post 74 is also, of course, formed with apertures through which the inclined portions of bar 91 pass.

In a modified gate arrangement, shown in Figure 8, the post 74 and panel 78 are omitted, and the free end of the horizontal rail 41, secured at its other end to post 74 is provided with a simple sliding bolt 116, accommodated in the central passage 19 of the rail and manually operable by a handle 118 connected with the sliding bolt by bolts (not shown) extending through a slot (not shown) in the rail 41. The bolt 116 also extends through a square aperture in an end plate 103 secured by screws to the central member in the manner described above. In the closed position of the gate of Figure 8, the sliding bolt 116 is engaged in a complementary recess formed in a member 122 secured to the upper end of the fixed post 10 which the free end of the gate rail 41 opposes in said closed position of the gate.

The system described with reference to the drawings has various advantages over known systems intended for the same general purposes.

Thus, because the central members, cladding, inserts, etc., are formed as extrusions they can be produced relatively inexpensively and with little labour, it being necessary merely to cut the extrusions to the appropriate lengths. The metal central members afford adequate strength while the plastic cladding has excellent wearing properties and if it should become damaged, is readily replaced without replacing the central

member etc. Furthermore because of the wide number of ways in which the components can be assembled together, the system is extremely versatile. The detachable plastics cladding can be made in any desired colour, and the ready interchangeability of the cladding makes it easy to change the colours of the posts and rail as desired, without undue expense, for example in the interests of decor or to implement colour coded routing schemes etc.

CLAIMS

1. A post for use in a barrier or personnel guidance system, the post comprising an elongate central member of substantially uniform cross section throughout its length, an elongate outer cladding member of substantially uniform cross section throughout its length, on the exterior of the central member, and means retaining the cladding member on the central member, said means including retention formation means provided on the periphery of the central member and complementary retention formation means provided on the inside of the cladding member and engaging in the retention formation means on the central member.

2. A post according to claim 1 wherein said retention formation means on the central member includes a longitudinal slot opening onto the periphery of the central member and having a relatively narrower portion adjacent said periphery and a wider portion further from said periphery, and the complementary formation means on the cladding member includes a T-section rib extending longitudinally on the inside of the cladding member, the stem of the 'T' extending through said narrower portion of said slot and the cross-piece of the 'T' being accommodated in said wider portion of said slot.

3. A gate arrangement for a barrier or personnel guidance system comprising a series of fixed vertical posts with adjacent posts being connected by horizontal rail members, the gate arrangement comprising a gate assembly interposed between a first said fixed vertical post and a second said fixed vertical post not otherwise connected with the first said fixed vertical post by a said horizontal rail member, said gate arrangement comprising:

a mobile vertical post disposed adjacent and parallel with said first fixed vertical post,

pivot means pivotally connecting said mobile vertical post with said first fixed vertical post for pivoting about a vertical axis,

and a barrier member extending from said mobile vertical post and movable therewith,

said pivot means including an upper and a lower pivot plate each lying substantially in a respective horizontal plane and each having a first aperture therein receiving rotatably a respective end of the first fixed vertical post, and a second aperture therein receiving a respective end of the mobile vertical post, whereby said pivot plates are pivotable conjointly about the vertical axis of said first fixed post, and said mobile post is pivotable about its vertical axis in said pivot plates.

4. A gate arrangement according to claim 2 wherein said first fixed post and said mobile post carry respective intermeshing gear members whereby the pivotal movements of the first fixed and mobile posts, relative to said pivot plates, are maintained equal during opening and closing movements of the gate assembly.

5. A gate arrangement according to claim 3 wherein said gear members are formed by respective part-cylindrical shells fixed to the exteriors of said first fixed post and said mobile post.

6. A barrier or personnel guidance system, comprising a series of fixed vertical posts with horizontal rail members each spanning the gap between a respective pair of adjacent said posts, the system including a gate interposed between two adjacent vertical posts, said gate including a first mobile vertical post disposed adjacent a first said fixed post, and a second mobile vertical post disposed adjacent a second said fixed post, means pivotally connecting said first mobile post to said first fixed post for pivoting about a vertical axis, and cooperating latch means on said second mobile post and on said second fixed post for retaining said gate in a closed position in which said second mobile post adjoins said second fixed post, and wherein said second mobile post and said second fixed post are both members of a cross-section affording a longitudinally extending outwardly open channel, said second posts being arranged so that in the closed position of the gate said channel of the second mobile post opposes said channel of the second fixed post, said latch means including a latch member mounted in said channel of one of said second posts for projection into and withdrawal from said channel of the other of said posts, and manually operable means for moving said latch member.

7. A post according to claim 1 wherein said central member has a cross-section providing a central through passage bounded by encompassing walls, and an outer structure, extending outwardly from said encompassing walls and providing the peripheral surface of the central member, and at least one channel, disposed outwardly of said encompassing walls, having side walls defined by said outer structure, and opening onto said peripheral surface, in addition to the respective said retention formation.

8. A post according to claim 1 which also provides, on its periphery a longitudinally extending channel for receiving an edge of a panel.

9. A post according to claim 7 wherein said longitudinally extending channel is provided by a strip of uniform cross-section throughout its length, retained on the central member by means of interengaging formations afforded by the cross-sectional shapes of the strip and said central member.

10. A post according to any preceding claim wherein said central member is formed of metal

and said cladding is of plastics.

11. A post according to any of claims 1 to 4 wherein said central member and the or each said cladding member are formed as extrusions.

12. A barrier or personnel guidance system incorporating a plurality of horizontally spaced vertical posts according to claim 7, adjoining said vertical posts being spanned by cross members each comprising a central member having the same cross-section as that of the central member of each of said vertical posts, and cladding on said central member, means retaining the cladding on the central member, said means including retention formation means on the inside of the cladding and engaging in said retention formation means on the central member.

13. A barrier or personnel guidance system incorporating a plurality of horizontally spaced vertical posts according to claim 7, adjoining said vertical posts being spanned by cross members each comprising a central member having the same cross-section as that of the central member of each of said vertical posts, and cladding on said central member, means retaining the cladding on the central member, said means including retention formation means on the inside of the cladding and engaging in said retention formation means on the central member, and wherein connection means, connecting each said rail member, at each end, with a respective said vertical post, comprises an insert received in the central passage of the rail member at the respective end thereof and extending into a said channel of the respective vertical post.

14. A gate arrangement according to claim 5 wherein the said first fixed vertical post and said mobile vertical post each comprise a central member and cladding on the central member and wherein the cladding of said first fixed vertical post is formed externally with gear teeth and the cladding of said mobile post is formed externally with complementary gear teeth meshing with the teeth formed externally on the cladding of said first fixed post, whereby said first fixed post and said mobile post operate as meshing gears rotatable in mesh about parallel vertical axes.

15. A post according to claim 1 and substantially as hereinbefore described with reference to, and as shown in Figures 2 and 7 of the accompanying drawings.

16. A gate arrangement according to claim 3 and substantially as hereinbefore described with reference to, and as shown in, Figures 1, 4, 5 and 6 of the accompanying drawings.

17. A gate arrangement according to claim 3 and substantially as hereinbefore described with reference to, and as shown in, Figure 8 of the accompanying drawings.

18. A barrier or personnel guidance system, substantially as hereinbefore described with reference to, and as shown in, the accompanying drawings.